

BENCHMARKS

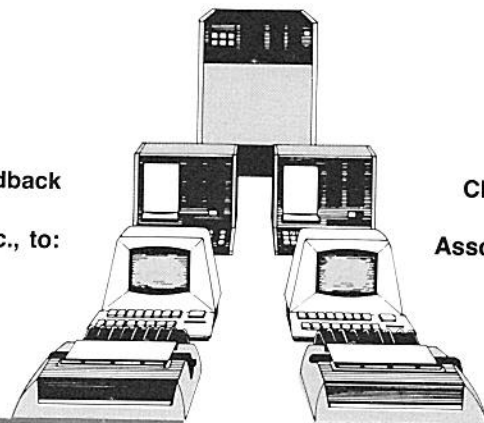
VOLUME 8 NUMBER 4 NORTH TEXAS STATE UNIVERSITY MAY 1987

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BENCHMARKS Reader/User feedback is encouraged.

Send all letters, suggestions, etc., to:
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BENCHMARKS

SERVICES AVAILABLE TO USERS OF THE NTSU COMPUTING FACILITIES

The NTSU Computing Center is located in the Information Sciences Building (ISB), Room 119. Phone Numbers:
 Computing Center: (817) 565-2324; Help Desk: 565-4050; Graphics Lab: 565-3479

Benchmarks Questions/Contributions, Etc. -Claudia Lynch
Information & ID-Codes; Disk Space Problems -Carolyn Goodman

Statistical/Research Support -George Morrow, Scott Barber

Claudia Lynch, Rocky Ward, Panu Sittiwong

Academic ADABAS/COM-LETE; CRSP &

COMPUSTAT Problems -Telka Clem

Student Programming Problems -CSCI Dept., GAB Room 542A; BCIS Dept., BA Room 152

JCL Problems; Password&Operating System Problems;

Communication/Terminal Problems -Help Desk

Data Entry; Test Scoring & Analysis -Betty Grise

Administrative Applications -Coy Hoggard

Printout Retrieval -RJE Operators

DIALING UP NTSU COMPUTERS OVER THE TELEPHONE

Phone numbers for the Local Area Network (LAN) are:

300/1200 BAUD: (817) 565-3300; 3499

300 BAUD: D/FW METRO 429-6006

1200 BAUD: D/FW METRO 429-9314

The numbers that will accept either 300 or 1200 baud communications have an autobaud feature that requires you to hit the {RETURN} key repeatedly so that the receiving modem can determine the appropriate baud rate. When you have established a communications link, the # prompt will appear on your screen and you can enter one of following

CALL commands to connect with the computer of your choice.
 CALL 8040 connects with the NAS/8083 (does not support full-screen editing)

CALL 3270 connects with the NAS/8083 through a 3270 protocol converter (supports full screen editing).

CALL DEC connects with the VAXcluster

CALL 780 connects with the Research VAX

CALL 2000 connects with the HP-2000

NTSU CABLE SYSTEM SCHEDULE

The current configuration of the NTSU cable system is as follows:

Channel 7-NT Daily. Broadcasts from the NTSU Journalism Department.

Channel 8-TAGER. Broadcasts go to and from NTSU to other links in this microwave network.

Channel 10-NTSU Computer System Status Monitor

(SSM). Displays the current status of the NAS, VAX and HP computer systems supported by the Computing Center.

Channel 12-Sammons Cable. Carries Cable News Network (CNN) unless a special program is requested.

Special broadcasts to and from classrooms can be arranged by the Media Library (565-2484).

HOURS FOR NTSU COMPUTER ACCESS AREAS: SUMMER 1987*

Days	Times	Location
Sunday	2-10 p.m. Noon-Midnight 1:15-8 p.m.	ISB 110 Terminal Area Computing Center RJE GAB 550C
Saturday, Sunday	Noon-11:45 p.m. 1-11 p.m.	College of Business Graphics Lab
Monday	7:00 a.m.-Midnight	Computing Center RJE
Tuesday-Saturday	Open 7 a.m. Tuesday-Open 24 hrs/day	Computing Center RJE
Monday-Thursday	8 a.m.-10 p.m. 8:15 a.m.-11:45 p.m. 8:15 a.m.-11 p.m.	ISB 110 Terminal Area College of Business GAB 550C
	8 a.m.-11 p.m.	Graphics Lab
Friday	8 a.m.-10 p.m. 8:15 a.m.-7:45 p.m. 8:15 a.m.-5 p.m.	ISB 110 Terminal Area College of Business GAB 550C
	8 a.m.-6 p.m.	Graphics Lab
Saturday	9 a.m.-6 p.m. CLOSE Midnight 1:15 p.m.-8 p.m.	ISB 110 Terminal Area Computing Center RJE GAB 550C

* Hours may vary. Check MUSIC/VAX News and/or posted schedules for exceptions.

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NEW POLICIES, PROCEDURES AND OTHER IMPORTANT STUFF

It's Not Too Early to Renew Your Userid!

By Carolyn Goodman, Computing Center Administrative Services

With the Summer Semester upon us, and the Fall Semester not far behind, it's time to think about renewing your USERID for the Fall. All Academic Individual USERIDs (NOT Classroom Accounts) currently in use will be active through August 31, 1987. If you plan to be away from the NTSU campus over the summer, it would be beneficial for you to complete this form before you leave so that your USERID will still be active when you return in September. If you haven't renewed your USERID by August 31, it will be deactivated.

The "Information Systems" section of the April issue of *Benchmarks* stated that new USERID Forms have been created and will be mailed- out to all departments by June 1. If you do not have a new pink USERID CHANGE FORM (F-020-02) and wish to renew your USERID, they are available in the Computing Center Main Office, ISB 119. **Only the new USERID CHANGE FORMs (pink) will be accepted after June 1, 1987.**

If you have any questions regarding this or other USERID matters, contact me at the Computing Center (565-2324). **Do plan in advance; don't wait until the last minute to renew your USERID!**

Computing Center Summer I Short Courses

The Computing Center is offering the following short courses for the second summer session. Please pre-register to attend. Only 20 people will be admitted per section. Courses marked with an * require knowledge of the MUSIC Context Editor. **THE COMPUTING CENTER RESERVES THE RIGHT TO CANCEL COURSES WITH LESS THAN 5 PEOPLE SIGNED UP.**

1. Three separate 2-hour introductory sessions on the MUSIC/SP interactive operating system, using the 3270 Protocol Converter to do FULL- SCREEN EDITING ON MUSIC/SP. To be held in Room 110 of the Science Library (ISB).

Saturday, June 20	: 9-11 a.m.	Instructor: Rocky Ward
Wednesday, June 24	: 6-8 p.m.	Instructor: Rocky Ward
Thursday, June 25	: 1-3 p.m.	Instructor: Panu Sittiwong
2. A two-hour session on save Files in SAS and SPSS-X. To be held in the Graphics Lab (ISB):

Monday, June 22	: 9-11 a.m.	Instructor: Scott Barber
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3. A three-hour session on VAX Utilities & Commands. To be held in Room 110 of the Science Library (ISB).

Monday, June 22	: 6-9 p.m.	Instructor: Ron Brashear
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4. A two-hour introductory session on SAS.* To be held in Room 110 of the Science Library (ISB).

Monday, June 22	: 1-3 p.m.	Instructor: Rocky Ward
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5. A two-hour session on using MUSIC/SP Utilities.* To be held in Room 110 of the Science Library (ISB).

Friday, June 26	: 9-11 a.m.	Instructor: Philip Baczewski
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6. A two-hour introductory session on SPSS-X.* To be held in Room 110 of the Science Library (ISB).

Tuesday, June 23	: 1-3 p.m.	Instructor: Panu Sittiwong
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7. A two-hour introductory session on IBM JCL.* To be held in the Graphics Lab (ISB).

Thursday, June 25	: 3-5 p.m.	Instructor: Telka Clem
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8. An introductory session on using CMS (for use with SAS/GRAPH). To be held in the Graphics Lab (ISB). **LIMITED TO FACULTY AND GRADUATE STUDENTS - MUST HAVE A CMS ID-CODE.**

Tuesday, June 23	: 1-3 p.m.	Instructor: Philip Baczewski
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9. An introductory on using SAS/GRAPH. To be held in the Graphics Lab (ISB). [Must be familiar with CMS to attend -see #8 above]
 Wednesday, June 24 : 1-3 p.m. Instructor: Panu Sittiwong
10. Electronic Mail on the Vax. To be held in Room 110 of the Science Library.
 Thursday, June 25 :9-11 a.m. Instructor: Ron Brashear

Getting HELP on MUSIC

By Philip C. Baczewski, MUSIC/SP Timeshare Coordinator (AC12@NTSMUSIC)

MUSIC/SP has an extensive on-line help facility. The MUSIC HELP facility provides information on the use of MUSIC and information on operating systems and programs accessible from MUSIC. The topics cover MUSIC commands (immediate and deferred), terminal error messages, subroutines, subsystems, utility programs, etc. There is also introductory information for new or novice users of MUSIC. To get help information type **HELP tp** in *GO mode or type **=tp** in the selection area of any full screen HELP facility menu, where *tp* is a topic name. To find out what topics are available, you may type **HELP TOPICS**. The TOPICS help file has recently been updated and expanded. The topics are grouped into six categories:

1. General Information
2. MUSIC Commands
3. MUSIC Utilities
4. MUSIC Compilers and Loaders
5. MUSIC Subsystems and Subroutines
6. The MUSIC Context Editor

To find information about MUSIC commands, for example, you could type **HELP TOPICS** and select category 2.

The topics listed in "HELP TOPICS" available from Command (*GO) mode. Other sources of information include:

1. The HELP command in the context editor gives information about editor commands. For example, while using the editor, you could type **HELP CHANGE** to find out how to use the editor CHANGE command.
2. To get the latest news about MUSIC, type **NEWS** while in *GO mode.

Advanced Statistical Procedure Module for SAS/PC Arrives

The Computing Center has received the Advanced Statistical Procedure Module for SAS/PC. Among the procedures available are:

1. ANOVA - for Analysis of Variance
2. Discriminant Analysis
3. Factor Analysis
4. Frequencies distribution, Cross-Tabulation, and various Measures of Association;
5. General Linear Model - For multivariate Analysis of variance, analysis of covariance, repeated measures analysis of variance, polynomial regression, etc.
6. Various Non-parametric tests
7. Regression analysis - Including Forward, Backward, Stepwise, all possible model selection, etc.
8. Scoring procedure - For computing and outputting coefficients of various statistical procedures (for example, factor score or regression coefficients).

This software is available to all full-time staff and faculty members. It runs on an IBM PC or other compatible machines, including the NTPC, with at least 512K of memory and a hard-disk. If you did not previously have the SAS/PC base product installed, it would required a total of 7m of disk spaces. Otherwise, it

requires 2m of disk spaces. In order to have the software installed on your machine, contact Panu Sittiwong at 565-2324 or send me a message via electronic mail.

FREE PC Stat Package Available to Academicians

According to a recent article in *PC WEEK*, Systat Inc. is offering free copies of Mystat for instructional use. Mystat is a downsized version of the Systat statistical program which has been marketed by Systat Inc. for some time.

Mystat reportedly condenses Systat's most popular functions onto a single floppy disk that requires 256K bytes of memory for operation. It can handle as many as 32,000 cases and 50 variables and it provides a full-screen editor and on-line help.

Mystat performs procedures such as frequencies, t-tests, analyses of variance and covariance, non-parametric statistics, multiple linear regressions with extended residual diagnostics, multiway crosstabs, and pairwise and listwise missing value correlations. It will generate graphs including scatterplots, histograms, stem-and-leaf plots, box plots and series plots.

Mystat can be copied for teaching, research, and other non-commercial purposes. To obtain a copy, send a stamped, self-addressed disk mailer along with your request on academic letterhead to Systat Inc., 2902 Central St., Evanston, Ill. 60201. Further information can be obtained by calling the company at (312) 864-5670.

Staff Professional Activities

Robert G. Brookshire, Manager of Academic Computing Services and David J. Molta, Communications Analyst, presented papers at the Western Social Science Association Meeting in El Paso on April 22. Dr. Brookshire's paper, "Microcomputer CPU Options: Choice Factors for Public Managers," is being distributed by the Computing Center as one of the *Working Papers on Personal Computers* announced in last month's issue of *Benchmarks*. Mr. Molta's paper, "Local Area Network Options: Choice Factors for Public Managers," will also be distributed as a "Working Paper".

Panu Sittiwong, Academic Computing Consultant, also presented a paper at the Western Social Science Association Meeting. Sittiwong's paper, "Explaining the Decision-Making of the Canadian Supreme Court: 1949-1985," was co-written with C. Neal Tate, Professor of Political Science at NTSU.

Another Academic Computing Consultant, Rocky Ward, presented a paper at the Southwestern Association of Naturalists Meeting in San Marcos, Texas. The paper was entitled "A Multivariate Analysis of Amphibian Distribution in a Transition Zone of East Central Texas".

Departmental Swap & Sell

5 TI Model 850 Printers for Sale - Contact Ben Copeland in the
Accounting Department (565-2088) for more information.

If you want to swap or sell departmental computer equipment, contact the Computing Center (565-2324). We frequently get calls from departments looking for used PCs and terminals.

MICROCOMPUTERS

PC-SIG Program Review

By Scott Barber, Academic Computing Consultant (AC10@NTSUV1)

- The Still River Shell

The Still River Shell is a good example of a shareware program which is useful and easy to learn and use. Essentially, it makes using DOS easier for newer users, and can save keystrokes and headaches for more experienced DOS users. In some ways, it is similar to XTREE, or FFM (see *Benchmarks*, Nov/Dec '86) in that it allows you to look at a sorted list of files in a subdirectory. From this list, you can copy, delete, move, or view selected files. You can also look at the tree structure for the selected subdirectory, search for files using DOS wild-card masking, and examine file attributes. There is also the capability to execute programs from within the Still River Shell by setting up function keys to attach to DOS Batch files. This allows for flexibility in the types of DOS functions you want to execute from the Shell.

One conspicuous weakness in my opinion is the inability to mark selected files for multiple operations. For example, if you wanted to copy certain files from a subdirectory on a hard disk to a floppy, and you could not refer to that specific group with the standard DOS wildcard conventions, you would have to copy them one at a time. It is faster than typing **DOS COPY** commands one at a time, but some other file managers are superior in this regard.

This program comes on PC-SIG library disk # 481 and is available from the Computing Center. It comes with an incomplete documentation file on diskette to encourage you to pay the \$35 registration fee. For \$15, you will receive just the latest version of the software and "some other useful utilities."

As with all other "user-supported," or "shareware" software, you are encouraged to examine it to see if it serves your needs. If so, payment of the registration fee provides monetary support for the author, entitles you to full-documentation and notification of updates, and nourishes an environment for the production of inexpensive, high-quality PC software.

- Masterkey, a Disk Utility Program

MasterKey is a program which lets you examine the data on any type of DOS disk, including floppy, hard, or RAM disk. You can view and edit a disk in hex and Ascii by sector. It has an unerase function, which is one of the Norton Utilities' most popular features. It is a little easier to use in some respects, although it is not as feature-laden as Norton.

You can search for matching files on a hard disk (and find that file you've been looking for, but don't know what subdirectory it's in), rename files and subdirectories, and examine and change file attributes. It will also let you change the date and time fields, which is useful if (for example) you want the date (post-editing) to reflect the old rather than present date.

It has a search function which allows you to search the disk for text, which you can then edit if necessary. (I haven't tried exploring a damaged disk to see how it deals with bad sectors.) Like Norton, it will not allow you to recover data by sector, only by file, so if a file flag has been written over in the FAT, you will need to use DOS's DEBUG to restore data sitting out there in space.

There is a troublesome quirk which needs to be fixed. The erase (& unerase) menu gives you a list of files on which to perform the operation. When you select and erase (or unerase) the file, it takes you back to the file list. Now, however, only the files below the previous file are displayed. If the file you erased was the bottom on the list, it will display the one above it. You can get a full list again by retreating one menu, and returning to the (un)erase menu. I hope the author will fix this in a later version, but it is manageable in the meantime.

If you want to examine a particular file, the program displays the file with a relative sector number, rather than the absolute cluster and sector address. Thus, you page through that file starting from (relative) sector number 0, and it stops when you get to the end of the file. In a way, this is preferable to the absolute addressing method used by Norton. Normally, a user will only want to examine one file at a time, and he/she does not have to search for an end-of-file marker. If you want to see more, you can pull out of the file editing menu to examine sectors prior to and following that file.

Overall, this is worth looking into if you have wanted a disk utility program like Norton, but have been reluctant to spend the money. Overall, *MasterKey* does most of the things that the Norton NU utility does, although in somewhat different ways. You will not be bothered by the differences if you haven't used Norton, and if you have you can easily get used to it and appreciate the small \$20 registration fee.

To get a copy of *MasterKey*, bring a formatted floppy to the Computing Center and ask for PC-SIG library disk #598.

Status Report for Office Automation Classes (Jan-Apr 1987)

By Sandy Franklin, Office Automation Specialist

In the Computer Training Lab and Information Center located in Marquis Hall, Room 105, the following classes were taught during the months of January through April 1987 to interested faculty and staff members.

- Introduction to WordStar
- Advanced WordStar
- Introduction to Micros
- Introduction to Lotus Spreadsheet
- MailMerge with WordStar
- Introduction to WordPerfect
- SIMS Training
- Lotus Database/Graphics

WordPerfect's Line Numbering Feature

By Sandy Franklin, Office Automation Specialist

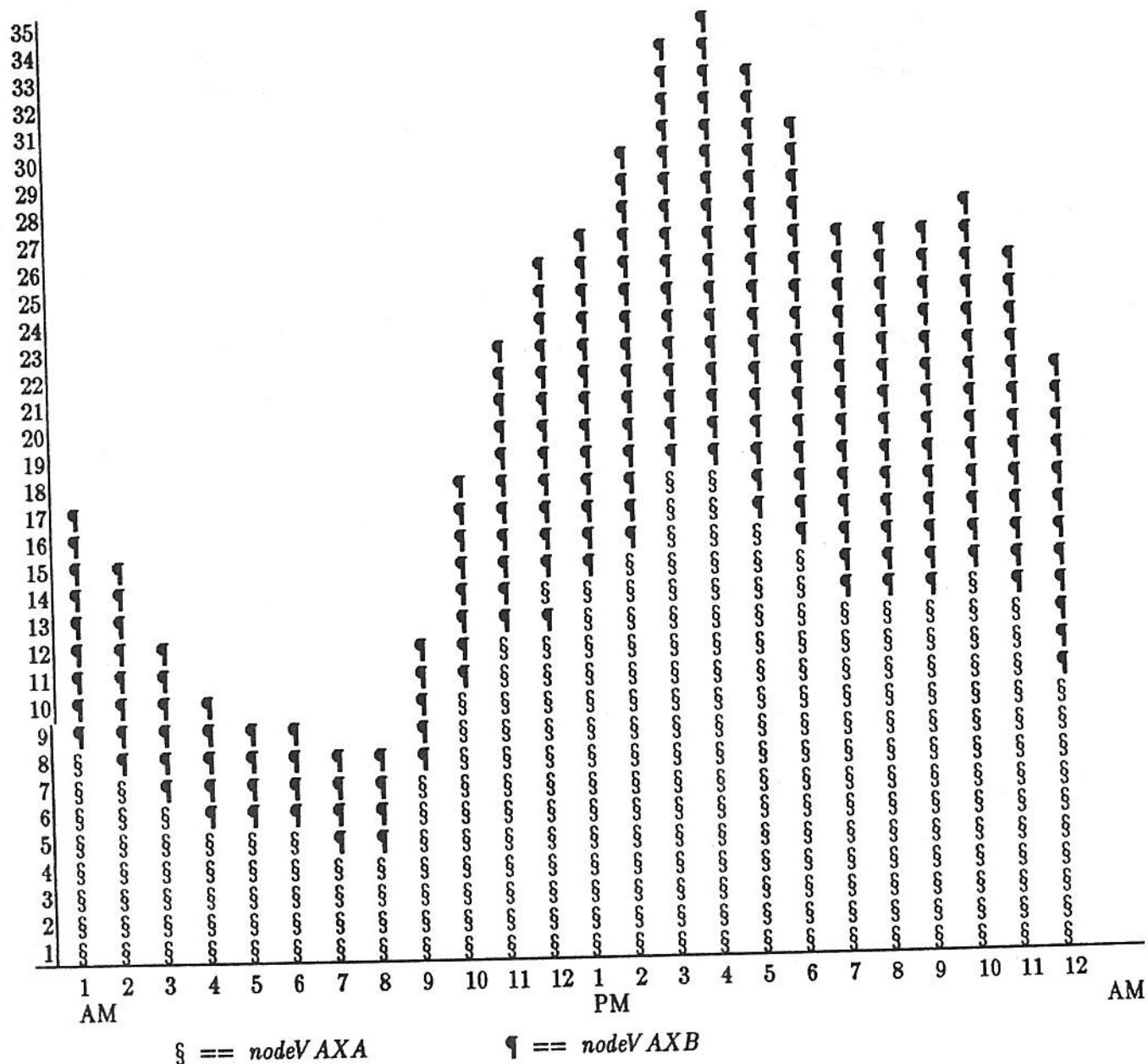
One of the keys to effectively using WordPerfect is recognizing the alternative uses for features ostensibly designed for other purposes. Available in WordPerfect Version 4.2, the intent of legal line numbering (`{CTRL}{F8}` - Item B) is for quick location of a certain section of a document. Line numbering any draft document would allow quick reference to items under discussion. Editing changes could even be dictated by phone or tape provided both parties had a printed copy of the draft. A teacher who wanted to discuss a paper or poem with the class could hand out a copy with line numbering. Also line numbering need not be reset at the bottom of each page. Instead of "page 10 line 5" one could refer to "line 285" if you've selected that numbering style.

The menu that appears when Line Numbering is selected is as follows:

- 1 Turn off **Off**
- 2 Turn on
- 3 Count blank lines? **Y**
- 4 Number every n lines, where n=1
- 5 Position of number from left edge: **6** (in tenths of an inch)
- 6 Restart numbering on each page? **Y**

VAXEN

**Average Number of Terminals Logged-On to the VAXcluster
During April 1987**



Guide to Useful VMS Utilities

By Billy Barron, VAX Operator (BILLY@NTSUVAXB)

- FINGER is a program that will give the name of the account owner given the account name.

Example: **\$FINGER AC32** (to find out who AC32 is)
 Jey Asir AC32

- USERID is the opposite of FINGER. Given a name it will find the userid.

Example: **\$USERID ERIC** (to find all users with the name ERIC)
 TOYE GENE ERIC AC23
 SEARS RAYMOND ERIC J FC43

- WHO shows you who is on the VAXcluster.

Example: **\$ WHO**

```

VAXA (present node)
VAX/VMS Interactive Users
7-MAY-1987 10:22:16.06
Total number of interactive users = 3
Username      Process Name      PID      Terminal
BILLY         BILLY              21000564  VTA273:      TTA4:
IG31          Denice             21000560  VTA271:      LTA261:
OR10          - Brain Dead -    21000656  VTA301:      LTA288:

```

```

Node VAXB
VAX/VMS Interactive Users
7-MAY-1987 10:22:32.80
Total number of interactive users = 4
Username      Process Name      PID      Terminal
FC48          TOM               20E0CB19  VTA7279      LTA7110:
JAMES         20E0D45A          VTA7244   TTA2:
OR22          KICK ME           20E08669  VTA7255      LTA7086:
PN01          PN01              20E0CF59  VTA7243      LTA7075:

```

- NAMES shows all the names of the people logged into the system.
 If you type **NAMES/NODE=BOTH**, you will see the names of people on the entire VAXcluster.

Example: **\$NAMES**

```

VAX/VMS Interactive Users
7-MAY-1987 09:50:29.33
Total number of interactive users = 5
Username      Process Name      Owner
BILLY         BILLY             Billy Barron
IG31          Denice            SHAW, DENICE MARIE
IG45          Tad Marko         Tad Marko
OR10          - Brain Dead -    Bennie Smith
OR22          KICK ME           SIMS, MATTHEW ROBERT

```

- SYSTAT shows you what programs people on the system are running.
 If you type **SYSTAT/NODE=BOTH**, you will see this information for the entire VAXcluster.

Example: **\$ SYSTAT**

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IG45 Tad Marko
IG31 Denice
BILLY BILLY
OR22 KICK ME
OR10 - Brain Dead -

DUA0:[SYSB.SYSCOMMON.][SYSEXEXE]PASCAL.EXE
DUA1:[ERDAS]ERDAS.EXE;1
DUA0:[SYSA.SYSCOMMON.][SYSEXEXE]TPU.EXE
DUA0:[SYSB.SYSCOMMON.][SYSEXEXE]EDT.EXE
DUA2:[OR10]P8.EXE;38

- **SHOWNODE** tells you which VAX you are on.

Example: **\$ SHOWNODE**

You are logged onto node VAXA.

- **DIE** allows you to kill a disconnected process that you have.

Example: **\$ DIE**

7-MAY-1987 10:07:19.19 VTA299: User: JAMES
Pid: 21000541 Proc. name: UIC: [24MAY83,JAMES]
Priority: 4 Default file spec: Not available
Devices allocated: VTA299:

Do you wish to stop this process (Y/N)? (Answer Y or N)

If you answer Yes, the disconnected process will be stopped.

There are many other good utilities such as **CHANGEMVSPW** and **OTHER**. Type **HELP** from the \$ prompt to get information on these and more information on the ones described above.

OPERATIONS

Disk Backup Schedules

Backup Schedule for OS/MVS

OS/MVS disk packs (academic and administrative) are backed up daily, Tuesday through Saturday, from 4-6:30 a.m., and Sunday from Midnight to 3 a.m. A backup of all the operating systems on the NAS CPU and their contents is done once every two weeks at some low activity period over a weekend.

MUSIC/SP Backup Hours

A message will be sent to all users signed on to MUSIC/SP approximately 10 minutes before backups are begun. It will be in the form **** MUSIC SHUT DOWN AT xxxx AM - SCHEDULED BACKUP ****. To find out the backup hours while signed on to MUSIC/SP, enter **HELP HOURS**. The following backup schedule is currently in effect:

Tuesday	3 a.m. (for about 3 hours)	Weekly backup
Wednesday - Saturday	4 a.m. (for about 2 hours)	Daily backup
Saturday	Midnight (for about 2 hours)	Daily backup

PHOENIX Backup Schedule

PHOENIX is backed up weekly on Sunday night. The backup begins at midnight and lasts for approximately 30 minutes.

VAX Backup Schedule

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Incremental backups of both VAX systems are performed Monday through Friday at 6 p.m. Users do not have to log-off, but any files that are open at the time of the backup will NOT be backed up.

Full backups of both systems are done every Friday beginning at 8 a.m. These generally will take all day to complete. Again, users do not have to log-off, but any files that are open will not be backed up.

A "Stand Alone" backup of the system disk is done once every two months. This procedure makes a copy of the system disk that can be used to restore its contents if the disk is completely destroyed. The system will be shut down; watch the system log-on message for specific times and dates.

NOTE: No backups are taken on the weekends. Requests for restoration of files should be made via MAIL to the username OPERATOR. Your file can only be restored if it existed before the last backup was done.

NAS/8083 Dual Processor Performance Statistics for April

CPU	SYSTEM	Scheduled Operating Hours	Planned Maint. Hours	Planned Production Hours	Unplanned Maint. Hours	Production Hours Achieved	System Uptime
ACAD	VM/SP3	720	0.10	719.90	0.08	719.82	99.9%
ACAD	MUSIC/SP	720	46.36	673.64	2.10	671.54	99.7%
ACAD	MVS/JES2	720	0.25	719.75	0.55	719.20	99.9%
ACAD	COMPLETA	720	0.28	719.72	2.14	717.58	99.7%
ADMN	MVS/JES2	720	0.20	719.80	0.50	719.30	99.9%
ADMN	COMPLETA	264	0.00	264.00	1.74	262.26	99.3%
ADMN	ADABASA	720	18.21	701.79	4.29	697.50	99.4%

System Uptime = (Production Hrs. Achieved) / (Planned Production Hrs.)

Production Hrs. Achieved = (Planned Production) - (Unplanned Maint.)

Scheduled Operating Hrs. = (Planned Maint.) + (Planned Production)

MUSIC/SP Planned Maintenance Hours include 28.96 hours for system backup and 17.22 hours for VM/SP3 system backup.

ADABASA'S Planned Maintenance Hours include 17.89 Hrs. for system backup.

The ACAD CPU achieved 100% uptime; the NAS/7360 DASD achieved 100% uptime; the NAS/7380 DASD achieved 100% uptime. The ADMN CPU achieved 100% uptime; the NAS/7360 DASD achieved 100% uptime; the NAS/7380 DASD achieved 100% uptime.

Lost productivity is calculated as the greatest amount of elapsed time that any one of the production systems was unavailable for scheduled operation. Lost productivity hours were contributed to by the following key causes:

ACAD CPU:

Miscellaneous

1. Undetermined causes for systems restarts.	0.22
2. Set CPU Clock to daylight savings time.	0.28
3. COMPLETA System failures.	1.30
4. VM/SP3 System Tuning/Improvements.	0.62
5. Suspected faulty tape volumes caused DASD backup failures.	0.60
6. MUSIC/SP Weekly Backup failure.	1.17

TOTAL 4.19 HOURS

GRAND TOTAL FOR ACAD 4.19 HOURS

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ADMN CPU:

Miscellaneous

1. Undetermined causes for systems restarts.	0.50
2. Reset CPU clock to daylight savings time.	0.32
3. Suspected faulty tape volumes caused DASD backup failures.	1.82
4. ADABASA shut down for DASD file maintenance.	1.93
5. COMPLETA System down to process single jobs.	1.24

TOTAL 5.81 HOURS

GRAND TOTAL 5.81 HOURS

TECHNICAL SUPPORT

ACADemic (NAS) Program Hit Parade *

The following programs were used the most frequently on the NAS CPU during the month of April. *Note that, as of the March "Program Hit Parade", the Other category has been omitted. Each program is now considered as a separate entity.*

APRIL TOP TEN PROGRAMS IN TERMS OF FREQUENCY OF RUNS

Program	Description	Number of Runs	Percent of Total
1. IEWL	Linkage Editor	15636	14.5
2. PGM=*.DD	Compiled Program	14777	13.7
3. IEBGENER	IBM Utility	13879	12.9
4. IKFCBL00	VS COBOL Compiler	11098	10.3
5. SCRIPT	Waterloo/SCRIPT	8357	7.8
6. SASLPA	SAS	7971	7.4
7. IEV90	Assembler H	6300	5.9
8. PTPCH	Dataset Lister	4715	4.4
9. IEFBR14	IBM Null Utility	4548	4.2
10. IEBPTPCH	IBM List Utility	3837	3.6

BENCHMARKS

MAY, 1987

APRIL TOP TEN PROGRAMS IN TERMS OF CPU SECONDS USED

Program	Description	CPU Seconds	Percent of Total
1. SASLPA	SAS	56019	30.4
2. PGM=*.DD	Compiled Program	42254	22.9
3. SPSSX	SPSS ^X	16317	8.8
4. SCRIPT	Waterloo/SCRIPT	16311	8.8
5. IKFCBL00	VS COBOL Compiler	13739	7.5
6. PTPCH	Dataset Lister	8794	4.8
7. IEV90	Assembler H	4734	2.6
8. ADARUN	ADABAS	4068	2.2
9. IEWL	Linkage Editor	3632	2.0
10. IEBGENER	IBM Utilitly	3149	1.7

** ACAD is the official designation of the part of the NAS/8088 CPU that is dedicated to faculty and student use. The portion of the computer reserved for University administrative purposes is termed ADMN.*

Registration Form for Computing Center Short Courses

Please complete this form and return it AS SOON AS POSSIBLE if you wish to attend any of the short courses listed below. You may also register over the phone by calling 565-2324.

NAME: _____ PHONE: _____

DEPT: _____ CLASSIFICATION: _____

I wish to attend:

- Introduction to MUSIC/SP:
 - Saturday, June 20 : 9-11 a.m. (ISB 110)
 - Wednesday, June 24 : 6-8 p.m. (ISB 110)
 - Thursday, June 25 : 1-3 p.m. (ISB 110)
- System Files in SAS & SPSS-X:
 - Monday, June 22 : 9-11 a.m. (Graphics Lab, ISB)
- VAX Utilities & Commands:
 - Monday, June 22 : 6-9 p.m. (ISB 110)
- Introduction to SAS:
 - Monday, June 22 : 1-3 p.m. (ISB 110)
- Using MUSIC/SP Utilities:
 - Friday, June 26 : 9-11 a.m. (ISB 110)
- Introduction to SPSS-X:
 - Tuesday, June 23 : 1-3 p.m. (ISB 110)
- Introduction to IBM JCL:
 - Thursday, June 25 : 3-5 p.m. (Graphics Lab, ISB)
- Introduction to CMS:
 - Tuesday, June 23 : 1-3 p.m. (Graphics Lab, ISB)
- Introduction to SAS/GRAPH:
 - Wednesday, June 24 : 1-3 p.m. (Graphics Lab, ISB)
- Electronic Mail on the VAX:
 - Thursday, June 25 : 9-11 a.m. (ISB 110)

Get a "Subscription" to *Benchmarks*

Benchmarks is a vital link between the NTSU Computing Center and the users of our facilities. It is important for all users of the computing facilities to maintain a file of these newsletters because they contain materials which will periodically update existing documents as well as information and suggestions on uses of OS/MVS, MUSIC/SP, the VAXcluster, Microcomputers, and other resources available to NTSU students and faculty. To facilitate the dispersal of *Benchmarks*, ***** FREE ***** subscriptions are available. To receive yours, send the following information to us either by "snail mail" (the post office or campus mail) or electronically, to the User-ID AS04 on MUSIC, VMS, or CMS.

Name _____

Mailing Address _____

PLEASE GIVE A CAMPUS ADDRESS (NOT BOX) IF POSSIBLE! - It's Cheaper !!

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